



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,394	01/25/2005	Yoshiharu Sato	10921.0272USWO	6311
52835	7590	11/28/2007		
HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902			EXAMINER OLSEN, KAJ K	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 11/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,394

Applicant(s)

SATO ET AL.

Examiner

Kaj K. Olsen

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-12 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 6-9 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 1-25-2005.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election in the reply filed on 10-24-2007 is acknowledged. However, this examiner is withdrawing the previous examiner's election requirement and all of claims 1-19 are being examined here.

Specification

2. The disclosure is objected to because of the following informalities: The specification must open with a paragraph stating that this application is a 371 National Stage Entry of PCT/JP03/09357 filed on 7/23/2003.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 2002/44705 (hereafter "WO '705"). For this rejection, the examiner is relying on the English language disclosure of Miyazaki et al (USP 7,232,510). All cited column and line numbers below refer to locations within the text of Miyazaki.

5. With respect to claim 1, WO '705 discloses a sample analyzing method based on the response obtained upon application of a voltage to a reaction field containing a sample, comprising a first step (e.g. S8 in fig. 5) of measuring a first response to determine output characteristics for the particular sensor in question. See col. 10, ll. 52-63. Because this measurement changes measurement characteristics and provides compensation data (col. 13, ll. 46-57), it reads on a calculation necessary for analyzing the sample. WO '705 further discloses a second step (S14-S20 and S50 of fig. 6) for measuring a second response necessary to determine whether a target amount of sample has been supplied to the reaction field (i.e. to determine it is not either a "sample short" or a "dripping point" error). See fig. 6, col. 12, ll. 28-46 and col. 13, ll. 15-38.

6. With respect to claim 2, WO '705 monitors the signals coming from the various electrodes as currents that are subsequently converted into voltage signals by the current/voltage converter 23. See col. 9, ll. 24-45.

7. With respect to claim 3, WO '705 utilizes electrodes leads A and F for the first response and either leads A and C, or leads A and E, for the second response. See fig. 5 and 6. Hence WO '705 relies on differing electrode combinations.

8. With respect to claim 4, see col. 7, ll. 36-43.

9. With respect to claim 5, electrode 38 (connected to lead A) is downstream of the upper portion of electrode 37 (connected to leads E and/or F). Alternatively, a second portion of electrode 37 is downstream of electrode 38. As a third alternative, electrode 39 (connected to lead C) is downstream of all of electrodes 37 and 38. See fig. 2.

10. With respect to claim 13, JP '705 discloses a sample analyzer comprising a voltage applier for application of a voltage to a reaction field (col. 9, ll. 18-23), a response measurer for measurement of a response to the voltage applied to the reaction field (col. 9, ll. 24-45), a selector for selecting a first voltage application state for measurement of a first response for use in a calculation necessary for analyzing the sample (S8 of fig. 5, see also the discussion above), and a second voltage application state for measurement of a second response for use in determining whether or not the reaction field has been supplied with a target amount of the sample (see fig. 6, col. 12, ll. 28-46 and col. 13, ll. 15-38). JP '705 further discloses an arithmetic operator 25 for calculation necessary for analyzing the sample based on the first response (col. 13, ll. 46-57) and a determiner for determination based on the second response on whether or not the reaction field has been supplied with the target amount of sample (see col. 12, ll. 28-46 and col. 13, ll. 15-38) and a controller for causing the selector to select the second voltage application state after causing the selector to select the first voltage application state (i.e. the first step in fig. 5 is programmed to occur before the second step in fig. 6).

11. With respect to claim 14, WO '705 monitors the signals coming from the various electrodes as currents that are subsequently converted into voltage signals by the current/voltage converter 23. See col. 9, ll. 24-45.

12. With respect to claim 15, WO '705 utilizes electrodes leads A and F for the first response and either leads A and C, or leads A and E, for the second response. See fig. 5 and 6. Hence WO '705 relies on differing electrode combinations.

13. With respect to claim 16, see fig. 4 and col. 9, ll. 20-23.

Allowable Subject Matter

14. Claims 10-12 are allowed.

15. Claims 6-9 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 6-9, the prior art does not disclose nor render obvious all the cumulative limitations of claims 1 and 6 with particular attention to the presence of a third step for determining whether or not the sample has moved in the reaction field while carrying out the first step. With respect to claims 10 and 11, the prior art does not disclose nor render obvious all the cumulative limitations of claim 10 with particular attention to the presence of a step of determining whether or not the sample has moved in the reaction field where this determination is made by checking a time course of the response obtained from the measuring points to see whether or not a first peak which appears is followed by a second peak. With respect to claim 12, the prior art does not disclose nor render obvious all the cumulative limitations of claim 12 with particular attention to the presence of a step of determining whether or not the sample has moved in the reaction field where this determination is made by checking a time course of accumulated response values obtained to see whether or not there has appeared an inflexion point. With respect to claims 17-19, the prior art does not disclose nor render obvious all the cumulative limitations of claims 13 and 17 with particular attention to the presence of an additional determiner for determining whether or not the sample has moved in the reaction field while carrying out the first step.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iketaki et al (US 2005/0258034) also discloses a determination of a target amount of sample during a second step (see paragraphs 0062 and 0063), but does not qualify as prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (571) 272-1344. The examiner can normally be reached on Monday through Friday from 8:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AU 1795
November 26, 2007


KAJ K. OLSEN
PRIMARY EXAMINER